

Method Of Making An Attenuated Phase-Shifting Mask From A Mask Blank

ABSTRACT OF THE DISCLOSURE

A method of patterning an attenuated phase-shifting mask from a mask blank, is provided. The mask blank has an attenuating and phase-shifting layer formed over a transparent layer. The phase-shifting layer has an initial thickness. The initial thickness of the phase-shifting layer is adapted to provide a first predetermined phase shift for a first wavelength of light passing therethrough. The initial thickness of the phase shifting layer is reduced to a first thickness. Portions of the phase-shifting layer are removed to form a pattern of clear areas. The first thickness of the phase-shifting layer at dark areas is adapted to provide a second predetermined phase shift for a second wavelength of light passing therethrough relative to the same light of the second wavelength passing through the clear areas. The first wavelength differs from the second wavelength.